

Abstract

The invention relates to a method of detecting and localizing malignant tumours and their metastases in tissues, which in healthy condition do not contain disturbing quantities of CCK-receptors, in the body of a human being, which comprises (i) administering to said being a composition comprising, in a quantity sufficient for external imaging, a labelled peptide derived from a compound of the general formula

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or an acid amide thereof, formed between a free NH<sub>2</sub>-group of an amino acid moiety and R<sub>2</sub>COOH, wherein

15 R<sub>2</sub> is a (C<sub>1</sub>-C<sub>3</sub>)alkanoyl group, an arylcarbonyl group, or an aryl-(C<sub>1</sub>-C<sub>3</sub>)alkanoyl group;  
 or a lactam thereof, formed between a free NH<sub>2</sub> group of an amino acid moiety and a free CO<sub>2</sub>H group of another amino acid moiety;  
 20 or a conjugate thereof with avidin or biotin;  
 wherein:

(Xaa)<sub>n</sub> stands for 0 to 25 amino acid moieties which are equal or different and are selected from Ala, Leu, Asn, Dpr, Gln, Glu, Ser, Ile, Met, His, Asp, Lys, Gly, Thr, Pro, Pyr, Arg, Tyr, Trp, Val and Phe;  
 25 m = 0 or 1;  
 Xbb is Asp, Dpr, Glu or Pyr, with the proviso that Xbb can only be Pyr when n = 0;  
 Xcc is Met, Leu or Nle;  
 30 Xdd is Met, Leu or Nle; and  
 R<sub>2</sub> is a hydroxy group, an acetoxy group or an amino group;  
 and thereupon (ii) subjecting said being to external imaging, by radioactive scanning or by magnetic resonance imaging, to determine the targeted sites in the body of said being. The invention further relates to a method for the therapeutic treatment of said malignant tumours by administration of the above-defined peptide, labelled for 35 this purpose.

The invention also relates to a method for labelling of the peptide compounds, to a pharmaceutical composition to be used for detection, to a pharmaceutical composition to be used for therapy and to a kit for preparing a radiopharmaceutical composition.